BOTANICAL NOTES FROM THE TECHNOLOGICAL MUSEUM.

By J. H. MAIDEN, F.L.S., AND R. T. BAKER, F.L.S.

No. IV.

(Plates XLI.-XLII.)

PITTOSPOREÆ.

HYMENOSPORUM FLAVUM, F.V.M.

This species occurs in brush forests near Wyong, its previous recorded southern limit being the Hunter River.

TILIACEÆ.

ELÆOCARPUS EUMUNDI, Bail.

This species was first described by Mr. F. M. Bailey, who discovered it in the Queensland locality from which it derives its specific name. It has since been obtained in fruit at Mullumbimby, Brunswick River (W.B.).

It is therefore new for New South Wales.

RUTACEÆ.

Boronia mollis, A. Cunn.

This species was for a long time only known from the Nepean and as far north as Port Macquarie. It has recently been collected at Murrumbo, Goulburn River (R.T.B.), which for the present is its most western locality.

SAPINDACEÆ.

RATONIA ANODONTA, Benth.

Since recorded in our Bot. Notes No. III. as new for New South Wales, it has been collected as far south as Burrell's Creek,

near Tinonee, by one of us, and in the county of Gloucester by Mr. A. Rudder, of the Forest Department.

LEGUMINOSÆ.

RHYNCHOSIA CUNNINGHAMII, Benth.

This species has been collected at Lismore (W.B.), and is therefore new for this colony.

LEGUMINOSÆ.

SWAINSONA PHACIFOLIA, F.V.M.

(Syn. Swainsona stipularis, F.v.M.)

This species has been collected as far east as Bathurst (W. J. C. Ross, B.Sc.).

Acacia aulacocarpa, A. Cunn.

A very plentiful species at Woodburn, on the Richmond River, where some trees measure over 80 feet in height and 3 feet in diameter. It has previously only been recorded from Queensland, so is therefore new for New South Wales.

Acacia Jonesii, F.v.M. et J.H.M.

Abundant in a gully at Kenmore, near Goulburn (J.H.M.).

SAXIFRAGE.E.

CERATOPETALUM GUMMIFERUM, Sm.

Has recently been found at Woodburn, Richmond River (W.B.), where it attains a height of over 50 feet and a diameter of 16 inches.

Its range, as far as we at present know it, is right along the coastal districts from the Moruya River to the Richmond River, attaining tree size throughout perhaps the whole of its range.

MYRTACEÆ.

EUCALYPTUS TRACHYPHLOIA, F.V.M.

This species has been collected at Cox's Gap, Murrumbo, Goulburn River (R.T.B.), and now is recorded for the first time for N.S.W. Its fruit and bark very much resemble some forms of *E. corymbosa*, to which it is very closely related.

A POCYNEÆ.

CHILOCARPUS AUSTRALIS, F.V.M.

In all the published descriptions of this species the flowers are stated to be yellow. We have now to record a white flowering form from Woodburn, Richmond River.

MONIMIACEÆ.

PIPTOCALYX MOOREI, Oliv.

(Plate XLI.)

It is only within the last few months that the fruits of this species have been brought to light. The plant has been known for many years, but has recently come into prominence through its bitter leaves, which have been introduced into Europe as a substitute for hops (Agricultural Gazette of N.S. W. v. 545). It has been recently figured, but without the fruits, in Hooker's Icones Plantarum (Vol. iv. Part 3, Pl. 2367). The plant figured differs from our specimens in being glabrous, while all known to us are rusty pubescent.

The fruiting perianth is oval in shape with a constricted base, and measures scarcely 2 lines in length and 1 line in diameter; colour purple when fully ripe, glabrous, fleshy with a hard muricate endocarp.

Seed with a membranous testa, pendulous from the apex of the cavity with a short hilum.

Hab.—We have received it from several localities, and its range as far as at present known may be stated as mountain ranges between the head waters of the Clarence and Macleay Rivers.

We have had the opportunity not only of examining these fruits for the first time, but as our specimens were perfectly fresh we are enabled to offer a complete and accurate plate of the species.

LAURINE Æ.

Bentham (B.Fl.v. 297) includes under Cryptocarya glaucescens, R.Br., one and perhaps more than one plant which examination of additional material has shown us to be worthy of separate specific rank. We propose to deal with one particular plant, and will endeavour to show that C. glaucescens, R.Br., var. reticulata, Meissn., is undoubtedly a good species, and that the name C. microneura, Meissn., should be revived for it. We will now, with the complete material and extended observations available to us, describe the species.

CRYPTOCARYA MICRONEURA, Meissn. in DC. Prod. xv. 27.

(Syn. C. glaucescens, R.Br., var. reticulata, Meissn., B.Fl. loc. cit.)

(Plate XLII.)

A tree over 60 feet high, glabrous except the inflorescence, which is always hoary-pubescent. Leaves broadly lanceolate, acuminate, obtuse, glabrous on both sides, a shade darker on the upper side, primary veins and reticulations equally distinct on both sides, reticulations fine but more distinct than in C. glaucescens, 6 inches long and 1 broad; petiole short, less than $\frac{1}{2}$ in. Flowers very numerous, mostly terminating in a large irregular panicle, but sometimes axillary. Perianth under 1 line, hoary pubescent, the tube turbinate, about equal to the lobes. Glands stipitate at the mouth of the tube. Staminodia scarcely sessile as in C. glaucescens and very much more acuminate. Fruiting perianth ovoid-oblong, 6-8 lines long, dark, shining, faintly ribbed.

Brief analysis showing relations to cognate species.

Leaves thickly coriaceous, smooth, shining above, the primary veins very prominent underneath, the reticulations inconspicuous.

Fruit globular.

C. obovata.

Leaves more or less coriaceous, the reticulations fine, conspicuous or obsolete on both sides.

Fruit globular.

C. glaucescens.

Leaves thinly coriaceous, the reticulations fine on both sides.

*Fruit ovoid-elliptical.** C. microneura.

C. glaucescens and C. microneura are found intermingled in the brushes along the whole northern coast districts of this colony as well as Illawarra, and their distinct character (without any intermediate forms that we can trace), is maintained throughout.

This species differs from C. qlaucescens in colour, texture and shape of its leaves, in its absence of glaucousness, and particularly in the shape of its fruits. The reticulations are also more prominent than in the former species, and the specific name is very appropriate. The staminodia are also more acuminate. fruiting perianth is entirely distinct; in C. glaucescens it is "depressed-globular," a shape uniformly maintained throughout the whole range of the typical species, but in this species it is ovoid-elliptical and consistently so. It measures about 6-8 lines long and 3-4 broad, is black and shining and faintly ribbed. The fruits of C. microneura have not hitherto been described. In fine, we have repeatedly examined the two species in the brushes from Illawarra to Port Macquarie, and have requested Mr. Baeuerlen, the botanical collector of the Museum, to make similar observations on the Richmond River. Our observations agree in that we are convinced that the trees are distinct.

PROTEACEÆ.

Petrophila pedunculata, R.Br.

This species has been collected at Bundanoon, near Moss Vale, by Mr. A. J. Sach, of Goulburn, which is at present its most southern recorded limit.

FILICES.

Polypodium aspidioides, Bail.

This species is first recorded and described by F. M. Bailey in the Synopsis of Queensland Flora, p. 714, where he speaks of it as "a beautiful fern which has for a long time been confused with Lastrea acuminata, T. Moore, the Aspidium acuminatum, Hort. Ang., and from which it only differs in the entire absence of indusium and in the longer and more aculeate marginal teeth."

We are led to confirm these observations to the extent of stating that we have examined a very large number of fronds of this interesting fern in all stages of growth, and have failed to detect on them a trace of indusium. The sori are usually flesh-coloured, or at least quite different in colour from those of Aspidium aculeatum, nor is it ever found proliferous like that species. It has been found at Tintenbar (W.B.), near Ballina, Richmond River, and so is an addition to the plants of this colony.

FUNGI.

COPRINUS COMATUS, Fries.

This well-known European edible fungus has been recently found abundantly at Annandale, near Sydney. Cooke in his "Australian Fungi" records at for Victoria only. It is a good ketchup fungus.

EXPLANATION OF PLATES.

Plate XLI.

Piptocalyx Moorei, Oliv.

Fig. 1.—Bud.

Fig. 2.—Expanded flower.

Fig. 3.—Part of raceme with early fruit.

Fig. 4.—Individual fruit.

Fig. 5.—Transverse and longitudinal sections of fruit.

Fig. 6.—Seed.

Plate xln.

Cryptocarya microneura, Meissn.

Fig. 1.-Flowering twig.

Fig. 2.—Bud.

Fig. 3.—Perianth.

Fig. 3'.—Expanded flower.

Fig. 4.—Stamen.

Fig. 5.—Staminodia (different views).

Fig. 6.—Gland.

Fig. 7.—Fruiting perianth.

All enlarged to various extent.